

**1 December 1998**

**Safety**



**LOCKOUT/TAGOUT PROCEDURES**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**NOTICE:** This publication is available digitally on the HQ AFRC WWW site at: <http://www.afrc.af.mil> and the AFRCEPL (CD-ROM) published monthly.

---

OPR: 440 AW/SE (James Paar)  
Supersedes 440 AWR 127-3, 31 March 1991

Certified by: 440 AW/SE (Lt Col Richard Burke)  
Pages: 3  
Distribution: F

---

This instruction implements and extends the guidance of AFPD 91-3, *Occupational Safety and Health*, as it relates to the Lockout/Tagout program. It establishes the minimum requirements for the lockout or tagout of energy-isolating devices as required by AFOSH Std 127-45 and 29CFR 1910.147. This instruction is used to ensure all personnel who work on or near energized equipment are protected from unexpected start-up that could cause injury. This instruction applies to all personnel assigned to General Mitchell IAP ARS WI and contractors performing maintenance on any equipment on this installation.

**SUMMARY OF REVISIONS**

Administrative changes have been made to update this standard to electronic format. Paragraphs have been renumbered and references updated. AF Form 982 has been changed to AF Form 981. A (I) indicates revisions from the previous edition.

**1. General :**

**1.1. Lockouts Required:**

- 1.1.1. The activation of a piece of equipment exposes employees to hazards.
- 1.1.2. The operation of a piece of equipment may cause damage to that equipment.
- 1.1.3. When it is necessary to prevent the unauthorized use of equipment.

**2. Responsibilities :**

2.1. The most essential step in assuring this lockout/tagout instruction being effective is management support for the program.

- 2.1.1. All commanders, functional managers, section supervisors, as well as each employee, are responsible to comply with the requirement of this instruction.

2.1.2. Each section supervisor must ensure required locks, lockout hasps, and AF Form 981, **Out Of Order Tags** are available for issuing to employees when required.

2.1.3. Each work center supervisor must ensure all powered equipment within their section is equipped with lockout/tagout capabilities.

### 3. Definitions :

3.1. Lockout. This term that means the locking and tagging of equipment in such a way that it cannot be energized without the lock being removed.

3.2. AF Form 981 will be used in conjunction with lockout procedures as required.

3.3. Maintenance and Servicing. The tasks necessary to keep a machine in a state of repair or efficiency. This activity includes inspection, servicing, repair, troubleshooting, setup, clearing jams, and other related activities.

3.4. Personal Hazard. A condition which could lead to injury or death.

### 4. Requirements :

4.1. Prior to any employee performing any servicing or maintenance on power production equipment, the individual performing the work must first obtain permission from the shop supervisor.

4.2. Equipment must be shut off at the appropriate energy source and all pressure lines bled down as necessary. There will be no pressure in any line tank.

4.3. The lockout hasp and lock will be installed at the energy source (disconnect switch or on/off switch) in such a way that will prevent anyone from inadvertently energizing the device being locked out. In addition, an AF Form 981 will be affixed to each lock. It will contain the following information when correctly completed.

4.4. Each person who works on a "locked out" piece of equipment will place their lock and tag on the equipment. Combination locks will not be used. Whenever this is not feasible, such as when large amounts of personnel are working on the equipment, the supervisor of each section performing maintenance will be responsible for lockout procedures using a departmental lock.

4.4.1. When multiple work centers are working on equipment, each individual performing work on the piece of equipment will lockout and tag the equipment. No individual will work under another individual's or work center's lock.

4.4.2. When work center locks are used, they shall be identified with the work center name and identification number. Logs will be maintained by each work center.

4.5. The individual performing the work will attempt to energize the equipment before beginning work on the equipment. The switches should be locked and tagged. After testing the device, return power switches to the de-energized position. If the equipment does energize, place power switches to the de-energized position and immediately contact the section supervisor. If the equipment is not equipped with lockout capabilities, see next paragraph.

**NOTE:** No work will be performed until it is positively proven that power has been disconnected.

4.6. Equipment not presently equipped with lockout capabilities will comply with the following instructions:

- 4.6.1. Necessary parts must be placed on order to ensure complete compliance with 29 CFR 1910.147.
- 4.6.2. Electrical breakers will be placed in the open position. The breaker will be tagged and access restricted by a completed AF Form 981, taped over the breaker by the individual or department performing the work.
- 4.6.3. Equipment equipped with knife switches, which are not equipment with lockout capabilities, will be pulled and tagged and access restricted by a completed AF Form 981. It will be taped over the knife switch to prevent anyone from inadvertently energizing the power source.
- 4.7. Whenever it becomes necessary for contractors to lockout and tag equipment, the following is required:
  - 4.7.1. The project representative assigned to the project is responsible to ensure the contractor complies with the requirements of 29 CFR 1910.147.
  - 4.7.2. The contractor performing the work will be required to provide the lock and properly lockout the equipment being worked on.
  - 4.7.3. The project representative and the contractor are responsible for removing their own locks and tags when the work is completed.
- 4.8. Upon completion of maintenance/servicing, the worker will ensure no one is standing near the machine before a lock is removed. When the lock and lockout hasp is removed, the section supervisor/shift leader will be notified the machine has been returned to normal operation.
- 4.9. Equipment having a cord and plug connection must follow the following procedures:
  - 4.9.1. Comply with paragraphs 4.1 and 4.2 of this instruction.
  - 4.9.2. The device will be unplugged from the energy source and the plug will be tagged with AF Form 981. This tag will be completed as outlined in paragraph 4.3 of this instruction.
  - 4.9.3. The plug must remain under the exclusive control of the employee performing the maintenance of servicing.
  - 4.9.4. Each person working on the piece of equipment must install their own tag. No individual will work under another individual's tag or a tag installed by another work center.
- 4.10. Training:
  - 4.10.1. Training will be provided to all personnel whose duties are or maybe in an area where lockout/tagout procedures will be utilized. This training will be conducted during the initial job safety briefing. Refresher training will be conducted by the supervisor at least annually or whenever there is a change in job assignments or a change to machine or equipment.
  - 4.10.2. All training will be documented on AF Form 55, **Employees Safety and Health Records**. Units using a computerized information management system may document training utilizing this system.

PAUL R. COOPER, Brig Gen, USAFR  
Commander